

A NEW SPECIES OF PECHALIUS CASEY FROM NEW MEXICO AND ARIZONA (COLEOPTERA: TENEBRIONIDAE)

CHARLES A. TRIPLEHORN

Department of Entomology, 1735 Neil Avenue, The Ohio State University,  
Columbus, Ohio 43210

ABSTRACT—*Pechalius bradleyi*, n. sp. from New Mexico and Arizona, is described and a key is presented for the identification of the 5 known species in the genus *Pechalius* Casey.

Since Casey's revision of the North American components of the Tentyriinae (Casey, 1907), little work had been done on the Epi-tragini until Freude (1967, 1968) published his "Revision der Epi-tragini". In the present paper, I wish to call attention to a species of *Pechalius* overlooked by both Casey and Freude and to present a key modified from both of those authors to include it.

Key to species of *Pechalius*

- |   |                            |
|---|----------------------------|
| 1. Tips of elytra simple, acuminate (fig. 1) .....  | 2                          |
| — Tips of elytra more or less truncate, with subapical denticles (fig. 3) or blunt protuberances (fig. 2) .....   | 3                          |
| 2. Lateral margins of pronotum bisinuate, the angles acute and prominent (fig. 4); segments 1-3 of metatarsus with sparse, short, stiff setae beneath .....   | <i>bradleyi</i> Triplehorn |
| — Lateral margins of pronotum distinctly arcuate, especially in anterior ½, angles not prominent (fig. 5); segments 1-3 of metatarsus with dense pads of pale pubescence beneath .....  | <i>pilosus</i> (Champion)  |
| 3. Each elytron with acute subapical denticle (fig. 3); dorsal pubescence in distinct patches .....   | <i>dentiger</i> (Horn)     |
| — Each elytron with marginal bead thickened and slightly reflexed just before attaining apex and terminating abruptly so that extreme elytral apex appears depressed (fig. 2); dorsal pubescence more uniformly distributed, at most somewhat in longitudinal stripes ..... | 4                          |
| 4. Segments 1-3 of metatarsus with sparse, short, stiff setae beneath; dorsal pubescence usually forming longitudinal stripes .....   | <i>subvittatus</i> Casey   |
| — Segments 1-3 of metatarsus with dense pads of pale pubescence beneath; dorsal pubescence uniformly distributed .....  | <i>vestitus</i> (Casey)    |

*Pechalius bradleyi* Triplehorn, new species

fig. 1, 4

Holotype: Sex undetermined. Elongate-oval, dark brown, distinctly pubescent, feebly shining. Head with epistomal margin broadly triangular, lateral lobes not prominent, surface convex from eye to eye, coarsely and densely punctured, punctures closer together laterally and anteriorly, a conspicuous, appressed

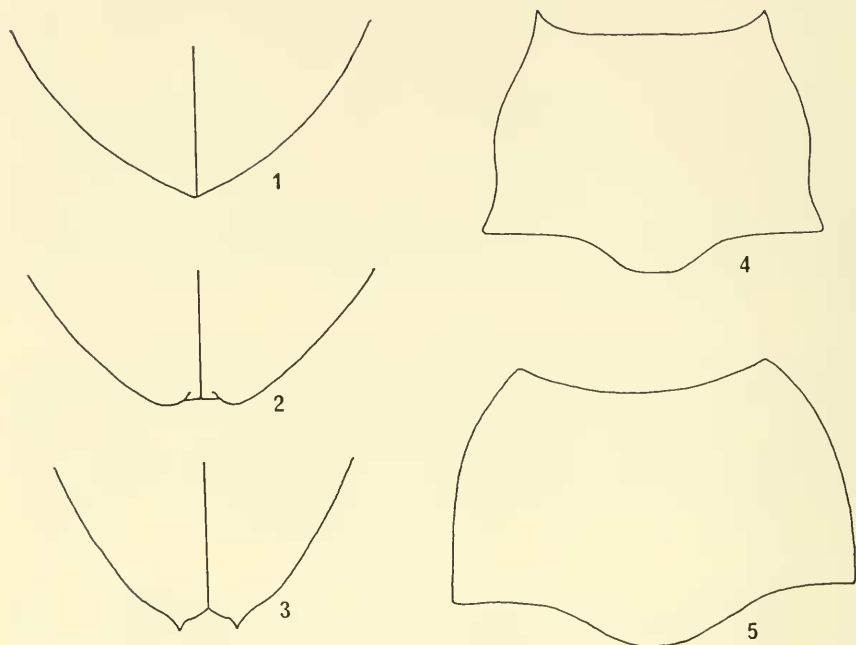


Fig. 1-3. Elytral apex of *Pechalius bradleyi* (1), *P. vestitus* (2), and *P. dentiger* (3). Fig. 4, 5, Dorsal view of pronotum of *P. bradleyi* (4) and *P. pilosus* (5).

silvery seta arising from each puncture; eyes large, finely faceted, slightly-convex; antennae short, extending posteriorly only slightly beyond middle of pronotum. Pronotum (fig. 4) broader than long, lateral margins bisinuate; apical margin broadly emarginate, apical angles acute and prominent; basal margin strongly bisinuate with conspicuous median lobe, basal angles acute; surface convex, punctation similar to that of head, punctures much coarser and more closely spaced laterally and apically and each bearing a conspicuous silvery seta, setae longer on lateral  $\frac{1}{4}$  of pronotum, a narrow but distinct median longitudinal impunctate line present. Elytra strongly wrinkled both longitudinally and laterally, coarsely, irregularly and uniformly punctured with slight suggestion of serial arrangement on either side of suture, each puncture bearing conspicuous, appressed, silvery seta; elytral apex simply narrowly rounded, without denticles or protuberances. Ventral surface of pronotum and prosternum coarsely and confluent punctured; prosternal process practically smooth medially, all punctures bearing silvery setae; mesosternum strongly U-shaped, receiving apex of prosternal process; remainder of ventral surface finely and densely punctate, silvery pubescence conspicuous, especially on abdominal sterna. Legs coarsely and densely punctured, pubescent; plantar surfaces of protarsi and mesotarsi clothed with dense pads of golden setae; plantar surfaces of metatarsi with coarse, uneven setae only. Length: 10.6 mm; width: 4.9 mm.

Variation: The entire type series is very uniform in regard to the characters mentioned in the above description. Measurements: Length: 9.9–11.4 mm; width: 4.5–5.4 mm.

Types: Holotype and 11 paratypes: Catron Co., New Mexico, 10 mi. N of Apache Creek, August, 1972, B. A. Triplehorn; 1 paratype, Apache County, Arizona, 5 mi. SE of Springerville (7500 ft.), 15 September, 1950, W. Gertsch, M. Cazier. Holotype and paratypes in The Ohio State University Collection of Insects and Spiders, paratypes in United States National Museum and American Museum of Natural History.

I take pleasure in naming this species in honor of my son, Bradley A. Triplehorn, who collected all but 1 of the known specimens. He informed me that all the specimens were found under chips and small pieces of wood around several large, long-dead, fallen logs.

Remarks: The shape of the pronotum and wrinkled elytra are sufficient to separate *bradleyi* from the other 4 known species of *Pechalius*. This species has an unmodified elytral apex similar to that of *pilosus* but I believe its affinities lie more closely with *subvittatus* with which it shares the character of coarse plantar setae on the metatarsi.

In fresh specimens, it is often difficult to see the character of the elytral apex because of the dense pubescence. In *subvittatus* the setae frequently form pointed tufts which, in the past, have been mistakenly identified as "teeth". The only species in which distinct, pointed denticles appear is *dentiger*.

I have seen large series of *subvittatus* from the Davis Mountains, Texas. All of the specimens of *dentiger* I have seen were from southeastern Arizona mountains (Santa Rita, Patagonia, Baboquivari, and Tucson) and Sonoyta, Sonora, Mexico. Three specimens of *vestitus* were seen, all from the Huachuca Mountains, Arizona. I can now record *pilosus* from as far north as Le Pesca in Tamaulipas, Mexico; it has previously been reported from Tampico and Vera Cruz.

I wish to thank Mr. T. J. Spilman of the Systematic Entomology Laboratory, USDA, for the loan of specimens of *P. pilosus* and *vestitus* determined by Freude and for helpful suggestions in the preparation of this paper. I have incorporated several of the suggestions made by Dr. Donald J. Borror, a master at preparing keys and general editing, whose help is gratefully acknowledged.

#### REFERENCES

- Casey, T. L. 1907. A revision of the American components of the tenebrionid subfamily Tentyriinae. Proc. Wash. Acad. Sci. 9:275–522.
- Freude, H. 1967. Revision der Epitragini (Coleoptera: Tenebrionidae), Teil I. Entomol. Arb. Mus. Frey. 1967:137–307.
- . 1968. Revision der Epitragini (Coleoptera: Tenebrionidae), Teil II (Schluss). Entomol. Arb. Mus. Frey. 1968:32–143.